

RTP GOALS

GOALS

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Six broad policy goals have helped guide the development of this RTP:

- Mobility — improve mobility of persons and freight
- Safety—improve safety for system users
- Equity — promote equity for system users
- Environment — enhance sensitivity to the environment
- Economic Vitality — sustain the economic vitality of the region
- Community Vitality — promote vital and livable communities

In this chapter, we take a close look at these goals and the particular challenges that each presents. The safety goal is new with this RTP; the other five are longstanding MTC policy commitments. We break each goal into discrete objectives and offer ideas on how we might measure the Commission’s progress toward achieving these objectives. The public input we received relative to each goal is summarized as well.

Among the clearest and most persistent messages we received was an exhortation to search for new and innovative solutions to stubborn transportation problems. In this spirit, we suggest a number of areas for MTC investigation and experimentation. At the same time, we identify the assistance or support from other transportation partners that would be needed to effectively pursue these new directions. While exploratory at this stage, we hope the most promising of these ideas can proceed toward implementation by the time of the next RTP update.

In addition to charting the Commission’s own progress in meeting these RTP goals, the plan defines a complementary set of measures to gauge the performance of the entire regional transportation system as improved by the RTP projects. These system performance measures (also new with this RTP) include travel time, accessibility and user benefits. But the plan itself is no guarantee of success. Public consensus, adequate funding, technological advances, the cooperation of transportation partners — all will be required in great measure if these goals are to be attained.

TEA 21 Planning Factors

The RTP goals are derived from planning factors established by the Transportation Equity Act for the 21st Century (TEA 21) and predecessor legislation. Specifically, under TEA 21 metropolitan and statewide planning processes must consider transportation projects and strategies that will:

- Support economic vitality
- Increase transportation system safety and security
- Increase accessibility and mobility options for people and freight
- Protect and enhance the environment
- Enhance the integration and connectivity of the transportation system
- Promote efficient system management and operation
- Emphasize preservation of the existing transportation system

GOAL 1—MOBILITY OF PEOPLE AND FREIGHT



Improve the ease and convenience of using the transportation system

The most essential function of this plan is to support the movement of people and goods with relative ease and in a reliable manner. Strategies for ensuring mobility must consider projections of future growth and the locations where this new growth will occur; the corridors in which growth will create the greatest “demands” on the region’s transportation system; the need to maintain the current transportation system even as the Bay Area experiences unprecedented demands for new improvements; and the need to coordinate and operate the multiple state, regional and local elements of the transportation system as a single integrated network.

Objectives

Measurement of Objectives

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|---|---|
| <ul style="list-style-type: none">• Preserve the condition of the existing transportation system | <ul style="list-style-type: none">• Percentage of estimated transit capital and local road pavement maintenance shortfalls funded in the RTP |
| <ul style="list-style-type: none">• Improve travel time in congested corridors by relieving bottlenecks and/or providing travel alternatives | <ul style="list-style-type: none">• Increase in person-carrying capacity provided by RTP improvements in the most congested corridors and the effect of these improvements on travel time |
| <ul style="list-style-type: none">• Improve the reliability of the transportation system so that users can expect relatively consistent travel times from day-to-day for the same trip on the same mode | <ul style="list-style-type: none">• Funding amounts in RTP for signal timing and coordination programs, freeway incident management, and transit productivity programs addressing on-time performance |
| <ul style="list-style-type: none">• Increase coordination and convenience of transit services throughout the region | <ul style="list-style-type: none">• Status of service and fare coordination agreements between transit operators• Progress in testing and evaluating TransLink® universal fare card |
| <ul style="list-style-type: none">• Provide travelers with good information when making trip decisions | <ul style="list-style-type: none">• Progress in data collection efforts for TravInfo®• Progress in conversion to 511 number• Monitor usage of transitinfo.org Web site• Progress in implementation of TakeTransitSM trip planning program |

The recent strength of the regional economy has both increased daily travel and spotlighted weaknesses in the transportation system. Signs of how much work must be done to achieve the mobility goal include overcrowded or unreliable transit service, the growing congestion on major freeways, the lack of transportation alternatives in some congested corridors, carpool lanes that are discontinuous, and the difficulty in getting to and from the region's freeways on local streets. Even localized congestion within cities has increased as new development outpaces transportation capacity.

Areas for MTC Investigation/Experimentation

Reversible Lanes

- Create new lane capacity more quickly by using reversible lanes in peak direction

HOV Lanes

- Convert some congested high-occupancy-vehicle (HOV) lanes from 2+ occupancy to a 3+ occupancy requirement
- Increase enforcement to preserve travel-time savings for legitimate carpoolers
- Determine where HOV lane-to-HOV lane connections can work

HOV Buy In

- Allow single-occupant vehicles to pay a toll for use of new or existing carpool lanes
- Use revenues to fund transit or intercity rail

Congestion Pricing

- Charge higher tolls on bridges during peak hours to shift traffic to off-peak hours and develop more transit options

Express Buses on Freeway Shoulders

- Allow express buses to use freeway shoulders to bypass traffic where there is no HOV lane or the HOV lane is overcrowded

Supporting Actions Needed From Others

Employers

- Develop comprehensive commute alternative programs for their employees (parking cash out, carpooling, vanpooling, transit subsidies, flexible work schedules, selection of sites near transit, guaranteed ride home programs for people who rideshare, etc.)

Caltrans

- Increase funding and staff support for operational programs such as the Traffic Management Center (TMC), TravInfo® and freeway management (incident detection, ramp metering, etc.)

California Highway Patrol

- Increase HOV lane enforcement

Cities

- Authorize freeway ramp metering in congested corridors (e.g., Interstate 80 and Interstate 880 in Alameda County)

Legislature

- Support for congestion pricing on toll bridges

Transit Agencies

- Consider charging for parking at rail stations
- Experiment with shuttles and demand responsive service

Federal Railroad Administration

- Allow greater flexibility in providing "positive separation" between freight and passenger rail vehicles

GOAL 1—MOBILITY OF PEOPLE AND FREIGHT

Illustrative Projects and Programs in the Plan

Providing Travel Information and Assistance

- **Freeway Service Patrol**
Roving tow trucks to assist motorists and help clear accidents on freeways to get the traffic moving more quickly
- **TravInfo®**
A single phone number for traffic conditions, transit schedules and other traveler information from any area code in the Bay Area
- **TransLink®**
A smart card that makes it more convenient to transfer between transit systems using the same stored value fare card
- **transinfo.org**
A Web site offering comprehensive transit trip planning services as well as information on routes, schedules and fares for numerous transit providers
- **RIDES for Bay Area Commuters**
MTC manages the regional ridesharing service, available to all commuters, to match people with partners for carpools and vanpools

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Certainly all of these challenges deserve attention and require unprecedented cooperation among a wide range of partners who share the responsibility of planning, designing, delivering and operating an effective and efficient transportation system.

What the Public Said

- Participants in the RTP outreach efforts felt that transportation conditions are getting worse, and they expressed a sense of urgency to address the situation.
- Participants clearly appreciate the need to invest in maintaining the roads and transit systems that have already been constructed and are currently operating, and to improve the performance of the existing transportation system and services (e.g., improving signal timing, better connecting transit services, filling empty buses, connecting carpool lanes on different freeways, filling underutilized carpool lanes, etc.).
- Congestion on freeways and roads was routinely cited as the major manifestation of the transportation problem.
- Participants believe that expanding transit will help relieve this congestion, but are concerned about the adequacy of the transit system, either because transit takes too long, doesn't run when they need it or doesn't take them where they need to go.
- Transportation planners should experiment with trial programs and pilot projects to test new and unique approaches to improve mobility. Participants expressed unfamiliarity with the various agencies involved in transportation, as well as confusion and even anger over complicated decision-making processes, and requested more leadership from MTC.

Policy Discussion

“Fix It First” Is Still Relevant. This RTP commits nearly 80 percent of its resources to maintaining the region's existing transportation infrastructure. Highways and roads need constant repaving; buses, rail cars and tracks all wear out over time and must be replaced; signal timing plans need to be adjusted over time; and cracks in sidewalks and bike paths need repairs. All of these repairs require ongoing funding, which must be set aside in the region's overall transportation budget.

Getting the Right Mix of Projects and Strategies. The public's frustration with high levels of congestion has created greater interest in finding near-term solutions that don't cost an arm and a leg. The RTP's mobility strategy strikes a balance of large projects that can meet future demand, and smaller, faster, less expensive fixes to current problems. This RTP supports managing the existing transportation system better and making it more efficient for its users.

System Management. Since the early 1990s MTC has stressed the importance of the systems approach to operating transportation facilities and services. Programs that support this system operations concept continue to grow and evolve. These include Caltrans' freeway operations programs, the expansion of the roving tow truck fleet on the freeways to help clear incidents, signal equipment updating and coordination of signals among jurisdictions, a universal transit-fare ticket, traveler information programs, and transit scheduling improvements that make use of global positioning satellite information. We expect continuing advances in technology to make a large contribution to the operations area. These include a variety of projects that use electronics, communications or information processing, commonly referred to as intelligent transportation system (ITS) projects. Recognizing that ITS projects work best when they are well coordinated, MTC has begun to work on a regional ITS architecture with our transportation partner agencies to ensure appropriate integration among separate ITS projects. This architecture will guide future project development, using the regional, state and national ITS frameworks, so that new transportation services and facilities can be better coordinated to enhance transportation system operations.

New Ideas. In early 2000, MTC unveiled a collection of transportation improvements, called the Bay Area Transportation Blueprint for the 21st Century, aimed at providing near-term relief in the region's most congested corridors. Many of these projects are proposed for funding in this RTP. Of particular interest to MTC is the creation of a comprehensive system of express buses operating on the region's carpool lanes and on major arterials.

This RTP is committed to further innovation and experimentation in order to move people and goods efficiently and reliably. Possible areas of investigation and experimentation are detailed more specifically on page 25.

Illustrative Projects and Programs in the Plan

(continued from previous page)

Managing Local Arterials

- **Smart Corridors**
Corridor-level coordination of traffic management systems
- **Signal Retiming**
MTC program to help local governments improve signal coordination within and between neighboring jurisdictions

Near-Term Congestion Relief

- **Regional Express Bus System**
Comprehensive system of express buses operating on region's carpool lanes and on major arterials. Examples of new express bus routes soon to be in service include:

AC Transit

Reduced headways on Transbay service

Golden Gate Transit

Expanded hours of service from Sonoma and Marin counties to San Francisco

SamTrans

Rapid bus service on El Camino Real

Santa Clara VTA

New and expanded service linking Silicon Valley to Fremont BART

GOAL 2 – SAFETY

Improve the safety of the transportation system for its users

Safety is essential to the transportation user and a key priority for the state and local agencies that plan, build and operate transportation facilities and services. Regional safety issues were most vividly highlighted when the 1989 Loma Prieta earthquake toppled one of our major freeways and shut down the Bay Bridge for a month. Even on a routine basis, however, there are safety concerns associated with all types of transportation, including transit, street and highway driving, walking, or biking around the region.

What the Public Said

- Participants in our workshops and public opinion poll noted significant safety concerns associated with growing traffic, people's ability to walk and use bikes for basic transportation, and security on transit.

Objectives

Measurement of Objectives

| | |
|---|---|
| <ul style="list-style-type: none">• Ensure key transportation facilities are capable of withstanding a major earthquake | <p>Progress in completing retrofits of:</p> <ul style="list-style-type: none">• State-owned toll bridges• Local bridges• BART system |
| <ul style="list-style-type: none">• Ensure MTC, Caltrans and the Bay Area transit operators can effectively coordinate their services following a major earthquake or other significant emergency that disrupts Bay Area transportation | <ul style="list-style-type: none">• Conduct annual earthquake emergency exercises with Caltrans and transit operators• Debriefing reports indicating future areas of improvement |
| <ul style="list-style-type: none">• Help ensure the safety of motorists using Bay Area freeways | <ul style="list-style-type: none">• Maintain and expand Freeway Service Patrols• Keep call boxes in working order and ensure quick call response time |
| <ul style="list-style-type: none">• Help ensure the safety and security of transit system users | <ul style="list-style-type: none">• Proportion of transit operators' budgets that directly contribute to the safety and security of their passengers |
| <ul style="list-style-type: none">• Assist local jurisdictions in their efforts to implement effective strategies to reduce serious injuries and loss of life for pedestrians and bicyclists | <ul style="list-style-type: none">• Decrease in the number of pedestrians and bicyclists in injury and fatality collisions in the Bay Area. |



MTC archives

- In response to the long and continuing deliberations on the design and cost of retrofitting Bay Area toll bridges for earthquakes, the public noted that it's long past time to get on with the job.

This RTP aims to improve safety on the region's network of roads, bridges, transit facilities and bicycle and pedestrian pathways. In particular, the RTP supports continued planning efforts to help identify preventive measures to address safety concerns.

Policy Discussion

Earthquake Preparedness. Because transportation facilities are vulnerable to the large earthquakes typical of our region, the Bay Area needs to invest in reinforcing highways, bridges, airports and fixed guideway transit systems. The failure of any of these systems after an earthquake could lead to substantial injuries and loss of life, as well as huge economic dislocation during the post-earthquake recovery phase. This RTP recognizes the unfinished business of retrofitting the region's toll bridges and the BART system. In

Areas for MTC Investigation/Experimentation

Safety Statistics

- Develop an integrated report system that consolidates safety information from a variety of modes to provide a comprehensive picture for the Bay Area

Freeway Safety

- Develop protocol for rapid clearing of big rig accidents that block freeway lanes
- Explore the possibility of special incident management teams to deal with big rig accidents

Pedestrians

- Investigate ways to increase funding available for pedestrian safety projects (e.g., dedicating a share of federal highway safety funds for this purpose)
- Develop a map of pedestrian collision data for every city in the region
- Support local education and enforcement campaigns.

Bicycles

- Conduct regional bike count to provide context for accident data
- Establish a hotline for bike safety problems
- Conduct education about bike use and safety

Supporting Actions Needed From Others

California Highway Patrol

- Increase freeway enforcement in general and specifically for trucks, and for drivers who create unsafe conditions around trucks

Cities

- Provide more education on bike and pedestrian safety

GOAL 2 – SAFETY

Illustrative Projects and Programs in the Plan

Bay Bridge Replacement

- In 2002, construction begins on a replacement span for the earthquake-vulnerable Oakland-to-Yerba Buena Island segment of the San Francisco-Oakland Bay Bridge. The new east span is scheduled to open to traffic in 2006 or 2007.

MTC Trans Response Plan

- Includes exercises designed to enhance transportation agencies' emergency management readiness. The exercise scenario assumes a 7.5 magnitude earthquake on the Hayward Fault that causes major damage to bridges, freeways, and port, rail and airport facilities.

Freeway Safety

- Clear Lanes Efficiently and Rapidly (CLEAR) Interstate 80 corridor demonstration project. The goal of the CHP's CLEAR program is to quickly reopen lanes to traffic following incidents during peak commute periods by providing additional motorcycle officers dedicated to incident response and clearance. The I-80 demonstration project coordinates CHP's CLEAR program with Caltrans' Traffic Operations System equipment and MTC's Freeway Service Patrol to deliver benefits to travelers.

Bicycle/Pedestrian Safety

- The Regional Bicycle Master Plan—a component of the RTP—combines local and countywide plans into a regional network that is integrated with the multimodal transportation system.
- Traffic Engineering Technical Assistance Program (TETAP) funds are available for bicycle/pedestrian safety.

addition, there are still a number of locally owned (city and county) bridges that require retrofitting for earthquake protection. These needs have been placed in the Blueprint portion of the RTP, and should have top priority for new funding.

A related activity involving earthquake preparedness is the need for coordination of transit service immediately following the event and continuing into the recovery of the transportation system. The region has adopted a plan for emergency communications and coordination of regional transit services. MTC and the region's transportation providers annually conduct a training exercise to test this cooperative process.

With previous earthquakes, there has always been a question about how to manage the funding of emergency services. The Blueprint portion of this RTP proposes creating an earthquake "savings account" for immediate response needs, including emergency capital and operating funds, and temporary loan programs.

Motorist Safety on the Freeways. Since the predominant mode of transportation today is the car, motorist safety has commanded significant attention nationally and at the local level. Advances in vehicle designs and occupant protection systems have lowered the incidence of crashes and reduced exposure of persons in cars to injury. Driver education and enforcement of measures to reduce alcohol-impaired driving, advances in emergency medical response times and emergency services, and development of regional trauma centers are among the reasons for the downward trend.

This RTP supports continued partnership between MTC, the CHP and Caltrans in several freeway safety initiatives, including Freeway Service Patrol tow trucks to assist motorists whose cars breakdown or are involved in accidents, and the maintenance of call boxes that motorists can use for immediate assistance. Both programs are designed to protect motorists from further exposure to risk and injury.

Transit Safety. The funding provided in the RTP for transit system rehabilitation and maintenance helps ensure that the region's transit vehicles and facilities are in good shape and do not contribute to problems of service reliability or safety. Also, allocation of funds for transit operations supports the ability of transit operators to provide police and security systems on transit vehicles.

Bicycle and Pedestrian Safety. Typical causes of bicycle and pedestrian accidents include drivers failing to yield to pedestrians at intersections and marked crosswalks, bicyclists and pedestrians failing to obey traffic signals, and pedestrians attempting to jaywalk across moving traffic streams. The safety of children walking or biking to school is of particular concern.

While addressing bicycle and pedestrian safety issues is primarily a local responsibility, MTC has convened a new Pedestrian Safety Task Force to develop proposals for larger regional involvement, such as the acquisition of better data on the causes of accidents, a resource guide, technical assistance, and education. Safety is one of the key elements of the new Regional Bicycle Master Plan as well. Through the Regional Bike Plan, this RTP supports the development of a continuous bicycle path network allowing cyclists to travel unimpeded through the region, integrating the region's bicycle and transit networks, providing secure bike parking at transit stations, and encouraging local jurisdictions to promote bicycle safety and security in their communities.

GOAL 3—EQUITY



Achieve fairness in the planning, funding and operation of the region's transportation system

The equitable distribution of transportation resources and benefits is a key goal of the RTP planning process. MTC has identified three central equity objectives for this plan:

- Ensure an equitable planning and decision-making process (i.e., all individuals and agencies should have equal access to information and the ability to participate).
- Establish an investment strategy that is equitable in terms of the criteria and distribution of funds under the Commission's control.
- Provide an equitable distribution of transportation benefits to all segments of the Bay Area population — including elderly and disabled residents, members of minority groups, and persons with low incomes — and ensure equal access to the transportation system.

Objectives

- Provide an equitable transportation planning and decision process; ensure that public comments are acknowledged and responded to
- Ensure that MTC's funding decisions are fair and equity is maintained between transportation agencies, modes, and segments of the Bay Area population
- Provide an equitable level of transportation service for elderly, disabled, minority, and low-income persons

Measurement of Objectives

- Periodic review of MTC public involvement procedures to ensure they are effective in engaging the public, including the way public comments are responded to
- Continued support for MTC's advisory committees to receive input on special transportation topics: Elderly and Disabled Advisory Committee, Minority Citizens Advisory Committee, Freight Advisory Council, and the MTC Advisory Council
- Assistance to partner transportation agencies in enhancing their public involvement efforts
- Funding policies established in the long-range plan reflect public review and comment
- Fund programming decisions, which carry out the broad funding policies in the RTP, reflect public and Partnership review
- A social equity analysis is performed for the RTP
- Definition of a regional Lifeline Transportation Network, including implementation steps and funding strategy
- Completion of Older Americans Transportation Study
- Establishment of a Lifeline Transportation Program to direct resources toward community-based planning and implementation strategies to make transportation more available, accessible and affordable for the region's low income population.

The Bay Area is geographically large and diverse. An effective process for engaging the public in transportation planning must take into account a number of issues: the long-range nature of many transportation plans, the regional as well as local focus of the RTP, the difficulty the public has in understanding who is in charge, and the lack of time in people's daily lives to participate. New and creative ways must be found to interact with the public. MTC recently undertook a comprehensive review of its public involvement process, and now has significant initiatives under way to improve it. (See separate report on RTP public involvement, referenced in Attachment C.)

This RTP seeks to ensure that equity is provided in the allocation of resources. For the funds under MTC's control, prime considerations include equity to the region's counties, equity to transportation agencies, equity among various travel modes, and equity among different user groups. Maintaining consensus on the distribution of these funds is increasingly difficult, given the intensifying demands and competition for available regional, state and federal funds. MTC's legislative advocacy program also helps to manage this competition through strong and continuous efforts to develop new transportation revenues, and to maintain the flexibility in current federal transportation programs to spend money on a diverse set of transportation projects.

Description of RTP Equity Analysis

- Use of MTC's travel demand forecasting model to evaluate changes in mobility and access for minority and low-income communities
- Use of Geographic Information Systems (GIS) mapping of grocery stores, child-care centers, educational facilities, hospitals and healthcare facilities, and one-stop government service centers in relation to transit routes to identify gaps in service that can be filled by the Lifeline Transportation Network
- Analysis of the funding allocations in the RTP with respect to regional, county and local investment choices, as well as by travel mode and transit operator

Areas for MTC Investigation/Experimentation

Transportation Affordability Study

- As recommended in the RTP Equity Analysis, MTC will conduct a transportation affordability study related to low-income persons and the hardships that the cost of transportation may create.
- As part of the Transportation Affordability Study and in partnership with local agencies, MTC will undertake a pilot program to evaluate the impact of subsidized transit passes on low-income student school attendance.

Lifeline Transportation Network

- Define the transit network for transit-dependent residents and identify costs and funding sources. Implement through community-based planning and transit operator plans and programs. Pursue new funding.

Welfare to Work

- Pursue new funding to maintain temporary services started under MTC's Low-Income Flexible Transportation program and the federal job access and reverse commute program

Supporting Actions Needed from Others

Congestion Management Agencies

- Provide technical assistance and local match funding for welfare-to-work and other equity programs

Federal Transit Administration/Transit Operators

- Develop transit rider profiles in terms of race and income for use in future RTP equity analyses and transit service planning

Federal Health and Human Services

- Merge HHS funding with regional transit operator funds to get more bang for the buck out of paratransit service

County/State Health and Human Services

- Partner with MTC and transit operators to develop a workable approach to improving transit affordability

GOAL 3 – EQUITY

Illustrative Projects and Programs in the Plan

New Public Involvement Procedures

- In March 2001, MTC adopted enhanced procedures for involving more Bay Area residents, particularly residents of low-income and minority communities, in the Commission's major planning and investment decisions.

RTP Outreach Process

- As part of the new public involvement procedures, the RTP outreach process entailed a telephone survey of registered voters, public workshops held throughout the Bay Area, and an interactive Internet survey. In total, over 4,000 Bay Area residents participated in the 2001 RTP outreach effort.

RTP Equity Analysis

- MTC undertook this analysis as part of the RTP, to ensure the full and fair participation of low-income and minority communities in the RTP preparation process, and to ensure that transportation benefits are delivered to these communities in a timely manner and in such a way that negative impacts are avoided.

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Many of the ongoing programs supported by this RTP deal squarely with equity in access to transportation services by low-income persons, elderly persons and persons with disabilities. These include efforts to develop transportation solutions for those transitioning from welfare to work, Transportation for Livable Communities funding that helps revitalize some of the region's most disadvantaged communities, the Low-Income Flexible Transportation program, and efforts to improve the availability and affordability of transportation options. By fully covering transit shortfalls, this RTP maintains the region's commitment to ensure that all public transit services are accessible to persons with disabilities in compliance with the Americans With Disabilities Act (ADA).

What the Public Said

- RTP outreach participants who depend on transit the most are very concerned that transit service is inadequate. Highlighted issues related to difficulty in making connections, transit taking too long, and not enough service to where people needed to go.
- Participants supported the development of a "lifeline" transit system — one that is capable of helping people in low-income communities get to and from key destinations — but there were a variety of opinions on how such a service should be funded, including getting more productivity out of the existing system as well as seeking new revenue.
- While the preponderance of people participating in the workshops — and those responding to our public opinion poll — did not feel transit was too expensive, this was not true of those with low incomes, who said current transit fares are too high.
- The public commented on various new transportation funding sources — sales taxes, gas taxes, bridge tolls, vehicle registration fees and the like — but typically did not express opinions about whether these fund sources were equitable for different segments of the Bay Area population.

Policy Discussion

Public Involvement — A Continuing Priority. This RTP is the first big test of new procedures aimed at improving citizen input to the plan. To kick off the RTP process, nearly 70 RTP-related workshops were held around the region to elicit input from business, environmental, labor and community-based organizations. An additional eight subregional meetings were conducted in the fall of 2001, after the draft RTP was released. As a complement to the regional MTC meetings, each county congestion management agency conducted its own public involvement process before submitting project recommendations to MTC.

Several of the outreach workshops were held in minority and low-income communities, and were conducted for the purpose of discussing social equity and environmental justice issues. MTC cosponsored these workshops with community-based organizations throughout the region and provided direct financial assistance to help with meeting preparations and recruitment of people to attend. This was the first time MTC partnered with community-based organizations in the development of the RTP. Over 700 people attended the community-based workshops and provided feedback on RTP goals, policies and projects. When needed, interpreters provided translation. Input from these workshops was summarized and presented to the Commission in May.

Environmental Justice and the RTP. The new federal environmental justice policy seeks to ensure that the benefits and burdens of transportation decisions and programs on minority and low-income communities are explicitly addressed in the regional transportation planning process. This RTP continues and expands efforts to address the transportation needs of minority and low-income communities. For example, the plan commits to fully funding the estimated transit capital rehabilitation and replacement shortfall, with much of this money going to transit operators in the urban core where the vast majority of transit-dependent riders live.

In addition, the equity analysis for this RTP includes an evaluation of travel benefits to low-income and minority communities, a definition of service improvements, and an analysis of how the RTP allocates funds. The analysis also identifies areas of future work to improve MTC's ability to evaluate the RTP from an equity perspective. The equity analysis is described in greater detail in Attachment C.

Implementing a Lifeline Transportation Network. Many of the equity themes relate to the inability of people in low-income and minority communities to travel to specific activities that are essential for daily life. This requires moving beyond the plan level, modeling-based analysis of the RTP to address real issues of need at the scale of neighborhood streets and local bus lines. As part of the overall equity review, this RTP defines a Lifeline Transportation Network, including transit routes, gaps affecting low-income communities and estimated costs to fill these gaps. This system addresses both spatial and temporal service gaps. Spatial gaps represent areas where there is no service but transit access is needed. Temporal service gaps represent times where needed service isn't offered or isn't continuous, or where service is not synchronized between two transit operators or two modes of transportation. The Lifeline Transportation Network is described in greater detail in Attachment C.

While a regional initiative can lead to the definition of a Lifeline Network, the region's low-income communities, transit operators and county social services programs will be key implementing agents of whatever is proposed. The Lifeline Transportation Network is considered on an equal footing with the Regional Transit Expansion Program serving peak-period commute travel. Both are viewed as complementary regional priorities within the RTP, and both serve to advocate the need for additional transportation revenues.

Illustrative Projects and Programs in the Plan

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Welfare-to-Work

- **Regional and County Welfare-to-Work Plans**

Plans were prepared in eight Bay Area counties to develop and implement innovative transportation strategies to help CalWORKs* participants and low-income individuals travel to work, child-care, school and other vital destinations. The ninth county plan is underway.

- **Low-Income Flexible Transportation (LIFT) Program**

This program was started with \$5 million in federal funds to accelerate implementation of local welfare-to-work projects identified in county plans. The program requires matching funds by local project partners. MTC has established an annual fund for LIFT, including State Transit Assistance and Federal Jobs Access/Reverse Commute funds to begin implementation of services identified by the Lifeline Transportation Network analysis and subsequent local validation of this analysis.

Transportation for Livable Communities Program

- Provides planning and capital grants to support small-scale transportation investments that can make a big difference in a community's vitality, such as streetscape improvements and transit-, pedestrian- and bicycle-oriented developments.

* California Work Opportunity and Responsibility to Kids welfare program.

GOAL 4—THE ENVIRONMENT



Plan and develop transportation facilities and services in a way that protects and enhances the environment

The Bay Area's prized environmental quality must not be sacrificed as we address the challenges presented by continued growth and increasing transportation demands. Historically, the major areas of environmental concern include air emissions, noise from transportation sources, impacts on the Bay and wetlands due to construction of facilities across or adjacent to the Bay, visual impacts of projects, community disruption and seismic safety.

Objectives

- Evaluate the regional environmental effects of the RTP
- Ensure that project-level impacts are addressed and mitigated prior to MTC approval of state and federal funding
- Ensure that MTC's plans and programs conform to the federal ozone attainment plan and support reductions in mobile source emissions required in the state Clean Air Plan
- Support programs directed at improving the flow of traffic on local streets and freeways to minimize vehicle emissions and excess fuel consumption
- Provide alternatives to traveling in single-occupant vehicles and incentives to carpool or take transit

Measurement of Objectives

- Adoption of a program-level environmental impact report under the California Environmental Quality Act (CEQA) that analyzes the potential regional impacts of transportation investments in the RTP
- Continue to require that project sponsors have approved environmental reports before seeking federal and state funding from MTC
- Air quality conformity determinations made for the RTP and the Transportation Improvement Program (TIP) that show that the region will achieve the transportation emissions budget in the ozone attainment plan
- Assist transit operators with bus replacement/repowering programs to lower nitrogen oxides and particulate emissions
- Implement new Transportation Control Measures and complete investigation of further study measures in 2001 federal ozone plan
- Funding support in the RTP and TIP for signal coordination/timing programs, freeway traffic management and Freeway Service Patrols
- Miles of HOV lanes in RTP and TIP. Support for pre-tax transit benefits and various fare instruments that provide transit discounts
- Maintenance of regional ridesharing program (RIDES for Bay Area Commuters)
- Adoption of Regional Transit Expansion Program and related funding agreements

The RTP devotes significant resources to maintaining the current transportation system and investing in system management and customer service strategies that are generally benign in terms of their environmental effects. However, the daily use of the transportation system by people commuting to work or making other trips will consume energy and generate emissions from motor vehicles that affect regional air quality. While state and federal agencies are directly responsible for the fuel economy of cars and the amount of tailpipe emissions, this RTP supports cleaner air through the development of alternatives to the private automobile.

Areas for MTC

Investigation/Experimentation

Parking Incentive Program

- Carry out a study of ways to encourage the conversion of free parking to paid parking in different environments. Also consider incentives for reducing off-street parking required by local jurisdictions for new development, and to increase the transit orientation of new developments.

Particulate Trap Retrofit Program

- Team with transit operators to examine the potential to accelerate the application of particulate traps on diesel-powered buses to achieve earlier compliance with state regulations

Study Effects of High-Speed Freeway Travel

- Estimate emissions associated with travel over 55 mph and over 60 mph, and compare these to the total motor vehicle emissions inventory. Evaluate feasibility of episodic speed limit enforcement on high-ozone days.

Enhanced Housing Incentive/ Station Access Program

- Seek additional funding to provide incentives for new housing near transit and improved access to transit stations

Update High-Occupancy-Vehicle (HOV) Lane Master Plan

Supporting Actions Needed From Others

State Legislature

- Allow Bay Area to tailor an improved vehicle Smog Check program to its needs, particularly the identification of gross polluters and subsequent emission fixes

Bay Area Air Quality Management District

- Increase funding for vehicle buy-back program, focusing on gross polluters

Environmental Protection Agency

- Tighten emission controls on aircraft and marine vessels, which are under federal control

Congress

- Adopt stricter fuel economy standards for all cars and light/medium-duty trucks
- Increase tax-free transit benefits to same level as parking benefits

California Air Resources Board

- Provide more flexibility in implementing NOx and particulate trap retrofit schedules for urban buses
- Enforce parking cash-out requirement

Employers

- More commute alternative program efforts, especially parking cash-out

Caltrans

- Develop new sound wall technologies and pavement treatments that provide better noise mitigation in the vicinity of freeways

GOAL 4—THE ENVIRONMENT

New Transportation Control Measures in 2001 Ozone Attainment Plan

- Regional Express Bus Program
- Transit Access to Airports
- TLC Program and HIP
- Expansion of Freeway Service Patrol
- Bicycle and Pedestrian Programs

What the Public Said

- The RTP telephone survey showed that the environment goal ranked lower in priority than other RTP goals, and the relationship of the transportation system to the environment was not spontaneously raised in many RTP outreach workshops.
- Where environmental issues did get raised, the most common threads were the importance of transit; the need to locate new housing and offices near transit; more bike and pedestrian facilities; accelerating the use of low-emission vehicles; and awareness of the need for more fuel-efficient vehicles and conservation of energy through changes in driving behavior.

Policy Discussion

Growth and Transportation. It is clear from the financial constraints in the RTP that the development of new transportation system capacity will lag considerably behind the growth in population and jobs. While there may be a few areas where transportation investments could alter land-use development patterns, much of what is occurring in the land development business has been set in motion by demographic, economic and fiscal forces more powerful than the region's limited highway and transit expansion efforts.

Specific projects can generate their own set of environmental issues, some quite controversial. Sponsors of individual transportation projects must, before receiving federal or state funding from MTC, prepare their own project-level environmental reports, and identify appropriate mitigation. These documents also must address local air quality issues prior to certification by federal transportation agencies.

What Are the Real Air Quality Trends? Probably the most visible connection in the public's eye between air quality and transportation is the potential role of greater public transit use. The RTP's major commitment to transit is the ongoing replacement of vehicles and the continuance of operating subsidies to ensure that the existing system will continue providing service in the future — two-thirds of all RTP funds are dedicated to this purpose.

Despite the technology-driven trend toward lower vehicle emissions, the federal air quality plan continues to include a set of motor vehicle control strategies, called transportation control measures (TCMs), which are intended to further reduce auto emissions. While there is considerable evidence that these types of strategies (see Attachment B) only provide small emission reductions, the RTP supports them because they also provide mobility benefits.

Among the new transportation control measures included in the *2001 Bay Area Ozone Attainment Plan* are MTC's development and expansion of a regional express bus program; initiatives to promote walking and bicycling as viable forms of transportation; the Transportation for Livable Communities (TLC) and Housing Incentive Program (HIP) initiatives, which provide incentives for transit- and pedestrian-oriented development; expansion of the Freeway Service Patrol; and improved transit access to the Bay Area's three major commercial airports.

The Need for More Efficiency From Cars. In addition to air quality issues associated with public health effects, the region must take steps to ensure a long-term energy supply, and reduce greenhouse gases that accelerate global warming. The most direct course to a solution involves requiring changes to the fuels and efficiency of automobile engines, which are regulated by federal and state environmental protection agencies.

This RTP supports other initiatives such as signal timing coordination and freeway traffic and incident management, which deliver energy use benefits by making traffic flow more efficiently. Reducing stop-and-go vehicle travel saves significant amounts of energy by allowing cars to move at the most efficient operating speeds.

GOAL 5—ECONOMIC VITALITY

Support transportation investments that are essential to the economic well-being of the Bay Area

The productivity and efficiency of the transportation system is a major factor in maintaining the economic vitality of the Bay Area. Despite the downturn of recent months, the regional economy has experienced a dramatic resurgence since the recession of the early 1990s, and the annual gross regional product for the Bay Area is now estimated at more than \$240 billion — which would rank 24th among the world's economies if our region were a nation-state.

The region has multiple job centers, each with its own specialization within the larger economy, requiring an effective transportation system to promote exchanges in people, products and services between these centers. Bay Area companies effectively draw from a regional labor pool, such that employees may live at considerable distance from their work due either to choice or housing conditions. Getting people to and from their homes and jobs will continue to be a major challenge, particularly as different job sectors grow and contract, with a constant rearrangement of commute patterns.

Objectives

- Ensure the Bay Area's major job centers maintain access to the region's labor pool
- Increase the reliability of the transportation system for the movement of freight
- Encourage increased commitments from employers to offer measures that will improve the convenience of the commute for their employees
- Develop increased public transit options for air passengers using the region's major commercial airports
- Plan for increase in air passengers, air cargo and waterborne cargo

Measurement of Objectives

- Delivery of transportation projects that increase the accessibility of major job centers to the rest of the region
- Freeway management strategies for major truck routes: incident detection, Freeway Service Patrol, ramp metering, etc.
- Number of employers and employees assisted by RIDES for Bay Area Commuters
- Funding in RTP for transit projects that improve access to airports
- Periodic updates and revisions to Regional Airport System Plan and San Francisco Bay Area Seaport Plan (see Attachment D)



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To stay competitive in the emerging global economy, the Bay Area must maintain the ability to quickly move people and cargo to other parts of the world by air and sea. The region's surface transportation links must be kept in balance with the air and sea terminal capacities for the entire system to work effectively.

What the Public Said

- The business community indicated that the high cost of housing forces employees to endure longer and longer commutes. This makes it difficult to attract and retain employees, and also affects workers' productivity.
- The public recognizes the need for the movement of goods, but is somewhat negative about mixing trucks with auto traffic. People would like to see more freight diverted to rail or ferries.
- In contrast, trucking firms believe it would be helpful to get more people into transit and carpools to free up capacity for trucks; they say highways are often the best option for moving freight.
- The localized impacts of goods movement (parking and on-street truck deliveries) also tend to draw negative responses.
- Safety is a concern due to the number of truck accidents (which may be caused by trucks or by cars getting in the way of less maneuverable big rigs).

Areas for MTC

Investigation/Experimentation

Truck Routes

- Ensure that key truck routes have the benefits of a full suite of freeway traffic management strategies such as the Freeway Service Patrol, call boxes, incident detection and traveler information services, starting with Interstate 80 and Interstate 880
- Explore other innovative options for freight movement in congested corridors

Airport Access

- Explore with airports and airlines the concept of remote ticketing and check-in at off-airport terminals, connected to airports by public and private transit; and seek more visible/convenient pickup locations at airport terminals

Supporting Actions Needed From Others

Cities

- Cooperate in identifying truck parking facilities in the Interstate 880 corridor for overnight use by trucks serving the Port of Oakland

Private industry

- Ship and receive more freight at night

Employers

- Develop comprehensive commute alternative programs as discussed under the "Mobility" goal to attract and retain employees, and ease the inconvenience of their commutes

GOAL 5—ECONOMIC VITALITY

Illustrative Projects and Programs in the Plan

Assistance to Employers

- **RIDES for Bay Area Commuters**
Provides ride-matching services to the public and employers.
- **Employer-sponsored commute alternative programs**, such as those at Cisco Systems and the city of Palo Alto, which provide transit subsidies to employees, bike programs and/or bicycle support facilities, telecommuting programs, full-time Employee Transportation Coordinators, and other services.

Airport and Seaport Access Projects

- **Joint Intermodal Transfer Facility**
A railyard project that would expand the Port of Oakland's capacity for freight container transfers between rail and ships. Recent seaport plan amendments will increase the JIT's operational efficiency.
- **Planned airport transit connections**
BART to San Francisco International Airport (coming in 2003), BART connector to Oakland International Airport (Track 1 funding), San Jose International Airport people mover connection to light rail (Committed funding).
- **California High Speed Rail System**
Plans are being developed for a system to span the state from north to south (Blueprint).

Projects That Would Improve Freight Mobility

- **I-580 truck climbing lane** over Altamont Pass (in the Blueprint)
- **I-238 widening** and truck bypass (in the Blueprint)
- **I-880 Corridor Truck Access Study**
The key study recommendations are to develop new and expanded truck parking facilities and to improve truck route maps and signage.

Policy Discussion

The Role of the Employer in Getting People to Work. As commutes become more taxing, employers are more concerned about improving the convenience of the commute for their workforce, both in order to protect the productivity of their workers and to retain them in a highly competitive job market. This RTP continues to support employers' efforts to offer alternatives to difficult commutes, including:

- a full-time or part-time transportation coordinator;
- ridematching services with preferential parking provided on site;
- flexible work schedules to enable employees to miss the peak of the commute;
- having transit tickets distributed on site or providing employees with pre-tax transit benefits through MTC's Commuter CheckTM program;
- running shuttles from the workplace to transit or organizing subscription buses;
- improving transit stops near their sites.

Improve the Ease of Goods Movement. While many people would like to see more freight shifted to rail or on other non-highway modes such as ferries, shipping freight by truck is more cost-effective than rail shipment for distances of less than 500 miles, and only about 1 percent of the goods moved on Bay Area freeways might be susceptible of diversion to rail. Putting some of the cargo that crosses the Bay on ferries to reduce trucks on bridges would be expensive to trucking firms if they had to pay for the ferry operations. Truck-only road facilities also are unlikely because of real estate costs and land-use constraints in urban areas.

For their part, the trucking companies would like to see fewer vehicles on the key truck routes and more reliable freeway operations, including quicker removal of accidents. Reliability is important to companies that minimize their inventory by relying on just-in-time deliveries. However, avoiding the so-called rush hour is getting increasingly difficult.

This RTP supports several approaches for easing the movement of goods:

- expand the capacity and improve freeway management on major truck routes;
- develop overnight parking and full-service truck stops in key corridors, such as Interstate 880;
- provide special response teams to manage freeway incidents involving big rigs, and to get traffic flowing more quickly after an accident.

Improve Surface Access to Airport and Seaport Terminals to Keep Pace With

Growth. Airports and seaports link the Bay Area economy to other parts of the U.S. and international markets, providing distribution points for passengers and freight. While the ultimate decisions about development and expansion of the region's airports and seaports are largely made by the operators of these facilities and their funding partners, such as the FAA for airports, these decisions must be coordinated with the planning of surface transportation connections. Given the volume of traffic on the freeways serving these airports, it is clear that new transit systems will be required, and these improvements are supported in this RTP. In addition, as these airports grow, it may be necessary to borrow some of the airport access concepts that are found in Europe, including:

- remote baggage ticketing and check-in;
- ferry services from areas such as the North Bay to San Francisco International Airport and Oakland International Airport;
- connections to a proposed California high-speed rail system, which would provide a link to the Central Valley or even serve as an alternative mode for passengers traveling to Southern California or Sacramento.

GOAL 6— COMMUNITY VITALITY

Support community-based efforts to improve quality of life by providing access to transportation funding

Transportation is one part of the complex equation that makes up our community vitality. This RTP expands support for integrating regional transportation planning with local initiatives aimed at improving quality of life by using the flexibility provided by federal transportation programs to seed community projects. The RTP also builds on regional interest in rethinking growth patterns. Current projections indicate a population growth of over 1 million new people for the Bay Area by 2025. How and where these people will be housed is one of the key questions to be addressed by MTC and the other regional agencies currently involved in the Smart Growth planning effort.

What the Public Said

- Over 90 percent of the participants in the RTP outreach process support strategies to place more mixed-use and compact development near transit and to build more housing in the region's core.
- About 60 percent of the participants strongly or somewhat opposed creating new suburbs and extending transportation to these areas.
- However, a number of people questioned whether the region could provide enough infill housing for the million new residents in the urban core, and whether growth boundaries in centrally located communities would simply exacerbate transportation problems by pushing more development farther out.

Objectives

Measurement of Objectives

| | |
|---|--|
| <ul style="list-style-type: none">• Maintain the condition of community roads and local transit equipment as a down payment on community vitality | <ul style="list-style-type: none">• Percentage of local street pavement and transit shortfalls funded in RTP in each county |
| <ul style="list-style-type: none">• Foster new ideas for improving communities through transportation investments | <ul style="list-style-type: none">• Number of TLC projects carried through the implementation phase• Completion of Smart Growth project and adoption of new land-use forecast by the Association of Bay Area Governments (ABAG) |
| <ul style="list-style-type: none">• Assist with efforts to plan and implement transit-oriented development projects | <ul style="list-style-type: none">• Number of new housing units created near transit associated with HIP effort |
| <ul style="list-style-type: none">• Support plans and programs that make it more convenient and safer to walk and bike | <ul style="list-style-type: none">• Implementation of Regional Bicycle Master Plan• Implementation of regional pedestrian safety program |



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- Some advocates for growth control suggested that MTC withhold highway funding or condition highway funding to limit the amount of suburban sprawl. Others support MTC using its funding allocations as a “carrot” to promote transportation and land-use coordination. Most agreed that neighborhoods, commercial districts and employment centers, regardless of location, should be designed better to make it easier for people to walk or bike to their destinations.

Policy Discussion

Expanding the Transportation for Livable Communities Program. This RTP recognizes that the main decision makers for changes in the land-use arena are the more than 100 locally elected councils and boards that govern the region, and as such continues to support a set of objectives to focus the role of transportation investment on:

- enabling residents to use a range of travel modes, including transit, walking and biking, to access jobs, shopping, recreation and other daily needs;
- providing that streets, transit, pedestrian and bicycle ways are part of a system of integrated routes;
- providing for a diversity of development and other community-oriented transportation strategies designed to limit the need to travel from one community to another to access basic necessities of living; and
- providing for the design of streets and other transportation facilities and amenities that are integrated into the overall community design and are conducive to a sense of community identity and pride.

Areas for MTC Investigation/Experimentation

Housing Near Transit

- Consider ways to pool a variety of funds from different agencies/sources to create greater incentives and accelerate the development of housing near transit

Jobs/Housing Balance

- For areas where housing near transit is not an option, provide technical assistance for new development combining jobs and housing together

Supporting Actions Needed From Others

Business and Environmental Organizations

- Work at the grass roots community level to support infill housing proposals

State

- Consolidate various incentive programs at Caltrans, Housing and Community Development, Treasurer’s Office, and other state agencies

GOAL 6— COMMUNITY VITALITY

Illustrative Projects and Programs in the Plan

Examples of TLC Projects

- **Ohlone-Chynoweth Commons, San Jose.** An affordable, rental housing development with 194 units, community facilities and convenience retail space adjacent to the Ohlone-Chynoweth light-rail station.
- **Acorn/Prescott Neighborhood Transportation Plan Improvements, Oakland.** The plan for this West Oakland neighborhood is designed to improve connections between the neighborhood shopping center, downtown Oakland, the West Oakland BART station transit hub and over 900 units of new or renovated housing.

Examples of HIP Projects

- **Sereno Transit Village, Vallejo.** A 125-unit affordable housing project built adjacent to the proposed transit center and within walking distance of a major shopping center.
- **Dublin Transit Center.** A large, mixed-use development adjacent to the Dublin BART station. A housing development with 1,500 units is proposed for the site.

Regional Bicycle Master Plan

- A component of the RTP, this plan combines local and countywide plans into a regional network of bike paths, bike lanes and bike routes integrated with the larger multimodal transportation system.

These objectives are the foundation for the Transportation for Livable Communities (TLC) program, which started in 1998 and was modified in 2000 to include the appropriately named Housing Incentive Program (HIP) to support denser housing near transit. These programs have engaged a whole new set of community-based organizations in developing plans and projects for their neighborhoods, and to help address transportation equity issues by directing funds to more disadvantaged communities in the region. This RTP commits substantially more flexible federal funds to pursue TLC/HIP objectives and extend the program to communities that have not yet participated.

A New Look at Smart Growth. MTC, the Association of Bay Area Governments, the Bay Area Air Quality Management District and three other regional agencies have launched a Smart Growth initiative intended to revitalize central cities and older suburbs, preserve open space and agricultural land, and enhance public transit. This RTP supports these objectives by committing to maintain existing streets and roads, promoting transit- and pedestrian-oriented development through programs such as TLC/HIP, and enhancing public transit through both the Regional Transit Expansion Program and programs for the maintenance and replacement of existing transit vehicles and facilities.